

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU080618\  
 Data File : VU025887.D  
 Acq On : 06 Aug 2018 15:44  
 Operator : MD/SY  
 Sample : VU0806MBS01  
 Misc : 5.00µl/10mL/100µL/5.0mL/MSVOA\_U/MEOH  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VU0806MBS01

Manual Integrations  
 APPROVED

MMDadoda  
 8/7/2018 1:51:36 PM

Quant Time: Aug 07 01:19:53 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U072718W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 00:49:55 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 166645   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 246550   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 243452   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 150481   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.31   | 65  | 132900   | 51.18 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.36% |      |
| 35) Dibromofluoromethane  | 4.89   | 113 | 108440   | 50.57 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.14% |      |
| 50) Toluene-d8            | 7.57   | 98  | 383969   | 51.17 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.34% |      |
| 62) 4-Bromofluorobenzene  | 10.31  | 95  | 142568   | 48.95 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.90%  |      |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.21 | 85  | 41263  | 16.38  | ug/l | 99     |
| 3) Chloromethane              | 1.33 | 50  | 44642  | 18.54  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.41 | 62  | 42653  | 18.83  | ug/l | 100    |
| 5) Bromomethane               | 1.63 | 94  | 25815  | 23.33  | ug/l | 100    |
| 6) Chloroethane               | 1.70 | 64  | 26377  | 19.91  | ug/l | 97     |
| 7) Trichlorofluoromethane     | 1.89 | 101 | 65400  | 19.97  | ug/l | 99     |
| 8) Diethyl Ether              | 2.10 | 74  | 23495  | 19.82  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.29 | 101 | 37996  | 20.04  | ug/l | 99     |
| 10) Methyl Iodide             | 2.41 | 142 | 31752  | 23.47  | ug/l | 99     |
| 11) Tert butyl alcohol        | 2.83 | 59  | 52086  | 91.62  | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.28 | 96  | 35342  | 19.75  | ug/l | 96     |
| 13) Acrolein                  | 2.20 | 56  | 35471  | 171.66 | ug/l | 97     |
| 14) Allyl chloride            | 2.60 | 41  | 63944  | 19.89  | ug/l | 98     |
| 15) Acrylonitrile             | 2.94 | 53  | 121376 | 106.94 | ug/l | 98     |
| 16) Acetone                   | 2.32 | 43  | 154906 | 122.37 | ug/l | 98     |
| 17) Carbon Disulfide          | 2.48 | 76  | 112336 | 19.40  | ug/l | 99     |
| 18) Methyl Acetate            | 2.62 | 43  | 58560  | 19.22  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.00 | 73  | 135524 | 20.90  | ug/l | 98     |
| 20) Methylene Chloride        | 2.71 | 84  | 45442  | 20.26  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 2.99 | 96  | 41617  | 20.12  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.58 | 45  | 134073 | 21.16  | ug/l | 98     |
| 23) Vinyl Acetate             | 3.53 | 43  | 588221 | 106.52 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.45 | 63  | 81530  | 21.43  | ug/l | 97     |
| 25) 2-Butanone                | 4.27 | 43  | 220025 | 127.68 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 4.23 | 77  | 73985  | 21.40  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 4.23 | 96  | 48212  | 20.67  | ug/l | 98     |
| 28) Bromochloromethane        | 4.55 | 49  | 36761  | 21.62  | ug/l | 100    |
| 29) Tetrahydrofuran           | 4.64 | 42  | 109058 | 105.63 | ug/l | 98     |
| 30) Chloroform                | 4.68 | 83  | 83657  | 20.84  | ug/l | 100    |
| 31) Cyclohexane               | 5.00 | 56  | 69784  | 20.29  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97  | 76875  | 21.27  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 5.14 | 75  | 59256  | 20.57  | ug/l | 98     |
| 37) Ethyl Acetate             | 4.39 | 43  | 66029  | 22.10  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 5.14 | 117 | 68219  | 20.90  | ug/l | 96     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU080618\  
 Data File : VU025887.D  
 Acq On : 06 Aug 2018 15:44  
 Operator : MD/SY  
 Sample : VU0806MBS01  
 Misc : 5.00µ/10mL/100µL/5.0mL/MSVOA\_U/MEOH  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleID :  
 VU0806MBS01

Manual Integrations  
 APPROVED

MMDadoda  
 8/7/2018 1:51:36 PM

Quant Time: Aug 07 01:19:53 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U072718W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 00:49:55 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 6.42  | 83   | 64202    | 19.45  | ug/l   | 96       |
| 40) Benzene                    | 5.39  | 78   | 173365   | 20.58  | ug/l   | 98       |
| 41) Methacrylonitrile          | 4.55  | 41   | 34662    | 20.89  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 5.41  | 62   | 69152    | 21.32  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 5.55  | 43   | 102078   | 20.68  | ug/l   | 99       |
| 44) Trichloroethene            | 6.19  | 130  | 48924    | 20.86  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 6.44  | 63   | 46328    | 21.09  | ug/l   | 99       |
| 46) Dibromomethane             | 6.56  | 93   | 33701    | 21.17  | ug/l   | 97       |
| 47) Bromodichloromethane       | 6.76  | 83   | 63745    | 21.00  | ug/l   | 99       |
| 48) Methyl methacrylate        | 6.63  | 41   | 49992    | 20.66  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 6.62  | 88   | 21779    | 369.87 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 408321   | 132.10 | ug/l   | 99       |
| 52) Toluene                    | 7.64  | 92   | 111121   | 21.24  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 71518    | 20.98  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 74246    | 21.20  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 45160    | 20.77  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 62816    | 20.22  | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 8.25  | 76   | 77801    | 21.28  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 7.13  | 63   | 117099   | 87.95  | ug/l   | 99       |
| 59) 2-Hexanone                 | 8.36  | 43   | 311533   | 128.58 | ug/l   | 99       |
| 60) Dibromochloromethane       | 8.48  | 129  | 52843    | 20.61  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 49777    | 20.58  | ug/l   | 98       |
| 64) Tetrachloroethene          | 8.23  | 164  | 45422    | 21.20  | ug/l   | 98       |
| 65) Chlorobenzene              | 9.12  | 112  | 126737   | 20.19  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 47164    | 20.77  | ug/l   | 98       |
| 67) Ethyl Benzene              | 9.25  | 91   | 208806   | 20.08  | ug/l   | 99       |
| 68) m/p-Xylenes                | 9.38  | 106  | 163485   | 40.96  | ug/l   | 99       |
| 69) o-Xylene                   | 9.78  | 106  | 77843    | 19.95  | ug/l   | 97       |
| 70) Styrene                    | 9.80  | 104  | 129994   | 20.63  | ug/l   | 99       |
| 71) Bromoform                  | 9.96  | 173  | 39534    | 20.08  | ug/l # | 100      |
| 73) Isopropylbenzene           | 10.17 | 105  | 214429   | 20.88  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.02 | 43   | 88148    | 21.02  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 73707    | 20.75  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 10.50 | 75   | 70913m   | 21.39  | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 57891    | 20.44  | ug/l   | 99       |
| 78) n-propylbenzene            | 10.59 | 91   | 252547   | 21.07  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 148561   | 21.16  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 10.78 | 105  | 180806   | 20.73  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 10.52 | 75   | 20246m   | 15.31  | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.78 | 91   | 172795   | 20.88  | ug/l   | 97       |
| 83) tert-Butylbenzene          | 11.10 | 119  | 171756   | 19.82  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 184805   | 20.91  | ug/l   | 97       |
| 85) sec-Butylbenzene           | 11.33 | 105  | 214171   | 20.24  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 192141   | 20.28  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 107025   | 20.35  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 108572   | 19.81  | ug/l   | 97       |
| 89) n-Butylbenzene             | 11.89 | 91   | 167452   | 19.15  | ug/l   | 98       |
| 90) Hexachloroethane           | 12.15 | 117  | 32916    | 19.54  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 105264   | 20.42  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 17509    | 20.79  | ug/l   | 94       |

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU080618\  
Data File : VU025887.D  
Acq On : 06 Aug 2018 15:44  
Operator : MD/SY  
Sample : VU0806MBS01  
Misc : 5.00µ/10mL/100uL/5.0mL/MSVOA\_U/MEOH  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VU0806MBS01

Manual Integrations  
APPROVED

MMDadoda  
8/7/2018 1:51:36 PM

Quant Time: Aug 07 01:19:53 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\82U072718W.M  
Quant Title : SW846 8260  
QLast Update : Tue Aug 07 00:49:55 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.51 | 180  | 67159    | 19.31 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.70 | 225  | 32066    | 17.49 | ug/l  | 98       |
| 95) Naphthalene            | 13.75 | 128  | 191398   | 17.95 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 67087    | 19.33 | ug/l  | 98       |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

